

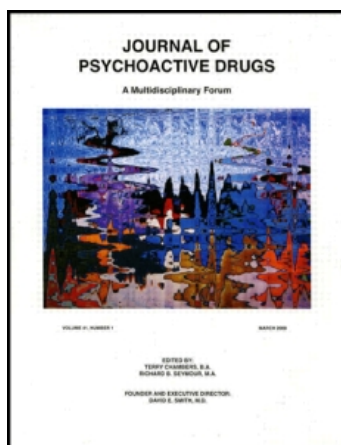
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Legally Tripping: A Qualitative Profile of *Salvia Divinorum* Use Among Young Adults[†]

Brian C. Kelly, Ph.D.*

Abstract—During recent years, there has been increasing interest in “legal highs” among youth and young adults. *Salvia divinorum* is a legally available hallucinogenic plant, primarily utilized in smokable form, that produces a brief but intense hallucinogenic experience for the user. Data are presented from an ethnographic project to provide a qualitative profile of salvia use among young adults. Most users report primarily using in home settings such as apartments and houses, although a significant minority report use in environments such as parks, bars, and parties. The intense nature of the substance creates a differential subjective experience. Some describe the intensity of the hallucinogenic experience in positive ways. Others find the experience so intense that they would not continue to use the substance. With regard to the health effects of salvia, most young adults report no significant negative health effects from salvia use, although some report a mental cloudiness. Beyond their own experiences, users did not report any negative health events among peers. The lack of reports of negative effects may reinforce social norms favorable towards salvia use. Overall, young adults report a relatively low risk profile for salvia divinorum, which may be influenced, in part, by its legal status.

Keywords—hallucinogen, *Salvia divinorum*, young adults

Drug trends fluctuate over time, vacillating with social, cultural, and political elements of society. Young adults are often the bellwether of changing trends of drug use. During recent years, there has been increasing interest in “legal highs” among youth and young adults (Boyer, Shannon & Hibberd 2005). In some respects, such interest in legal highs is emblematic of the information age. Information

about numerous psychoactive substances has proliferated, at times enabling the pursuit of novel highs and new altered states of consciousness. Earlier this decade, synthetic tryptamines—such as “foxy” and AMT—were the legal highs *du jour*. They facilitated hallucinogenic trips without the legal threat.¹ The growth of the tryptamines trend dissipated with increased legal scrutiny. Yet, the recent growth in the use of *Salvia divinorum* has come on the heels of the legal highs trend and is emblematic of a broader trend of youth pursuing alternative psychoactive substances.

Salvia divinorum is a hallucinogenic plant that has gained increased interest as a recreational substance among youth and young adults. It is primarily known simply as “salvia” among users—and is referred to as such throughout this article—although it has been given other slang nicknames such as “Sally D” or “magic mint.” It is currently legal to distribute and possess in most regions of the United States, as it is not on the Federal Schedule of Controlled Substances.

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While not currently a mainstream phenomenon, salvia has diffused beyond the incubation stage, and it has recently attracted not only increased interest from youth and young adults interested in psychedelic experiences, but also from parents, politicians, and public health professionals.

Salvia is a cultigen, that is to say it does not seed and is cultivated through branches of an existing plant (Valdés et al. 1987), and the herb has recently been subjected to laboratory evaluations. Researchers have isolated the primary psychoactive component of the plant and labeled it Salvinorin A. Further, it has been shown that Salvinorin A works solely on the kappa-opioid receptors in the brain, making it a unique hallucinogen (Chavkin et al. 2004). This appears to be the first naturally occurring substance of its kind, as most other hallucinogens interact in some way with serotonin or other neuroreceptors. Given this unique feature of the substance, its potential medical uses are largely unknown, but several have argued that it may have significant medical potential. Some suggest it may possibly help with depression, addiction, and mental disorders with psychosis or hallucinatory experiences (Appel & Kim-Appel 2007). Case reports indicate that it may have antidepressant properties (Hanes 2001). Also, because it works on the kappa-opioid receptors in the brain, some suggest that it may ultimately have utility for the development of a new painkiller (Prisinzano 2005).

Although a recently emergent recreational drug trend in the U.S., salvia use has had a long history. The herb is indigenous to southern Mexico, more specifically the highlands of Oaxaca. It was used in spiritual rituals by natives of the Sierra Mazateca, the Mazatec (Valdes et al. 1987). The Mazatec used salvia for the purpose of inducing visions in spiritual pursuits. The Mazatec, who are nominally Catholic, refer to salvia as “ska maria pastora,” which roughly translates into “the leaf of Mary, the shepherdess” (Valdes, Diaz & Paul 1983). For this reason, the Mazatec handled the herb with care. In the indigenous use of *Salvia divinorum*, a curandero would typically brew the salvia into a beverage, which would then be consumed by those seeking visions under the curandero’s guidance. Salvia in such instances may be used to facilitate contact with the spiritual realm, for example to enable contact with Mary or the saints. The medicinal value accorded to salvia by the Mazatec is for treatment of bowel irregularity, headaches, and rheumatism, among other maladies, albeit the medicinal dose is lower than that utilized for divination (Valdes, Diaz & Paul 1983). Thus, *Salvia divinorum* is considered to be a powerful herb with both medicinal and spiritual value within its indigenous context.

In contrast to indigenous uses, the recent trend of *Salvia divinorum* use among youth and young adults appears to be primarily recreational. The sale and distribution of salvia from various sources has spread across regions throughout the United States in recent years, in part due to modern systems of information diffusion. The Internet has been cited as

widely used not only for obtaining information about salvia, but facilitating salvia distribution as well (Hoover et al. 2008). Thus, as has occurred in other contexts (e.g. peyote), traditional ritual hallucinogens have been refashioned for modern recreational purposes.

Samples drawn from college students indicate that salvia remains somewhat of a fringe drug although one with recent growth in use. For example, Lange and colleagues (2008) found that approximately 4.4% of college students reported using salvia within the past year. These results are similar to those found by others (recent use, 3.0%), which also suggest a lack of chronic use (Khey, Miller & Griffin 2008). Although these incidence rates indicate growing interest in salvia, Khey and colleagues (2008) also found that only 22.6% of those surveyed had even heard of *Salvia divinorum*. Among those who had used the substance, 51% of users reported they would not try the substance again, while only 17% reported they definitely would try it (Khey, Miller & Griffin 2008). This is consistent with anecdotal accounts indicating that even those who do use the substance seem to use it infrequently.

The potential harms from recreational salvia use remain unclear. Research with lab rats suggests that a fatal dose of salvia is improbable, thus indicating a low overdose potential (Prisinzano 2005). With regard to the published literature, there are no toxicological studies indicating a pattern of medical harm resulting from salvia use (Lange et al. 2008). However, there have been clinical case reports in which salvia is indicated to have played some sort of role in a negative outcome such as paranoia and cognitive impairment (e.g. Singh 2007). While there is some concern for abuse and drug induced psychosis, salvia’s short and long-term effects have not been sufficiently examined to determine its definite dangers (Appel & Kim-Appel 2007).

Salvia remains mostly legal in the United States; however, some states and municipalities have legislated against the substance in some way. Some have rendered it illicit in all contexts—equivalent to a statewide Schedule I label; others have inhibited the distribution process, while still others have implemented restrictions on sales to minors (Griffin, Miller & Khey 2008). Some states have pending legislation regarding the substance. Although not on the Federal Schedule of Controlled Substances, the DEA placed *Salvia divinorum* on its list of “drugs of concern” in 2003. Some of the complications related to legislating *Salvia divinorum* at the federal level relate to matters of scientific research. As noted earlier, the unique aspect of Salvinorin A binding to kappa-opioid receptors has stoked interest in its possible healthful effects within the medical community. Placement on the federal schedule may inhibit research and development of potentially valuable medical uses for the substance (Griffin, Miller & Khey 2008). Thus, for now, the substance remains unrestricted at the federal level.

Though emergent across the nation, research on the use of *Salvia divinorum* is lacking in the scientific literature, and

many basic questions remain about the patterns and contexts of its use. Though the literature has been expanding, limited behavioral research on salvia use has occurred. In particular, research based on qualitative methods is largely lacking in the literature, which is significant because qualitative methods have been identified as critically important for examining emergent drug trends (Singer 2006). To redress these gaps, data are presented from an ethnographic project designed to describe the relationship between use of *Salvia divinorum* and risk among young adults involved in various youth subcultures.

METHODS

The data for this article were drawn from an ethnographic study of *Salvia divinorum* use among young adults in New York City and in a metropolitan area of over 150,000 in Indiana in 2008–09. The study was focused on “legal highs” and was funded by the National Institute on Drug Abuse (DA021259-01, an expansion of a study of recently-scheduled tryptamines to encompass legal highs). Data collection methods consisted of ethnographic fieldwork and formal interviews. During ethnographic fieldwork, the author conducted informal interviews about *Salvia divinorum* use and participant observation at shops at which *Salvia divinorum* was sold as well as locations in which young adults socialized. These ethnographic data enable a more holistic understanding of the phenomenon and help to develop fuller interpretations of the subject. In this regard, participant observation can enable a fuller understanding of the social contexts of youth drug use. All fieldwork resulted in descriptive documentation in field notes, which were written as soon as possible after the event.

A group of 25 interview respondents were recruited from various venues in which youth and young adults socialized. Inclusion criteria for the in-depth interview cohort were individuals who (a) were between the ages of 18 and 29, (b) reported the use of *Salvia divinorum* within the previous year, and (c) were willing and able to consent to participation. Respondents participated in audiotaped interviews that lasted between 40 minutes and one hour and were transcribed verbatim.² Participants signed an informed consent form and the study was approved by the Purdue University IRB.

The interviews consisted of open-ended questions designed to gain an insider’s perspective on a range of salient issues pertaining to salvia use (Geertz 1983). Ethnographic interview techniques such as critical incident measures as well as analytic contrasts were employed in order to gather detail-rich data with reduced recall bias (Leonard & Ross 1997). A thematic analysis of data was employed to gain an empirical understanding of the experience of salvia use among young adults. The quotations employed in this study provide descriptive evidence of thematic patterns across the interviews. They represent sentiments expressed by several

young adults, not simply unique perspectives. All quotations are derived from taped in-depth interviews, except where noted. Such quotations are supplemented by data from field notes to provide fuller illustrations of salvia use among young adults.

Sample Characteristics

The individuals interviewed in this study were young adults recruited in Indiana and New York. The sample was largely male (84%) and almost three-quarters (72%) of the sample was White. These characteristics reflect trends in *Salvia divinorum* use found by other research teams (Lange et al. 2008; Khey, Miller & Griffin 2008), and general trends of hallucinogen use more broadly. The subjects ranged in age from 19 to 28, with a substantial majority between the ages of 21 and 24. An overwhelming majority identified as heterosexual or straight. Notably, a majority of the respondents (68%) had experience with hallucinogens such as LSD or mushrooms prior to their first use of salvia.

RESULTS

The interview subjects overwhelmingly reported smoking salvia as their primary mode of consumption, although one individual reported an interest in indigenous methods of use and described an attempt to pursue a psychoactive state through chewing salvia. The subjects also reported consuming a wide range of “strengths” of salvia, ranging from “5x” to “80x,” as calculated by those selling it. The “strengths” refer to concentrations of Salvinorin A in the product. Young adults typically indicated that the strength of the salvia used dictated the depth of the hallucinatory state during the psychedelic trip.

Subjective Experiences

Most of the young adults interviewed reported vivid visual hallucinations within seconds after smoking salvia. Thus, they described a rapid onset of effects. The altered states of consciousness produced a wide array of psychoactive effects. For some, these included perceptions of changes in bodily form. For example, Steve (SD007) said,

Honestly, I thought I was made out of Legos. I don’t know why or what in my mind made me start thinking that I was made out of Legos but I got up and, I don’t remember doing it, but I got up and was trying to describe that I was made out of Legos, I was bending my arm just like this for about a minute and then I sat back down. Yeah, I was sitting for a minute and was just going back and forth and then I sat down and “do you remember what you just did?” and I was like “nah, no not really, not too much at all” but it was pretty neat, anything that can really, without lasting effects, for that short amount of time just get you completely bonkers out of your head is pretty neat in its own right.

Steve was not alone in describing perceptions of bodily change as other young adults described experiences such

as feeling as if they were “absorbed into the floor” from the waist down (SD002) or turning “into a piece of art on the wall and people were looking at me.” (SD006)

Others perceived being relocated to a different setting, as if the context around them shifted with the onset of the psychoactive state. David (SD010) described,

I just sort of leaned back into the couch and I looked at the room around me and it sorta seemed like it turned into a scene from the Spanish coast and I could just see the ocean and land. One friend was sitting right in front of me and he was wearing this bright yellow shirt which sort of ruined anything I was seeing, but his face kind of turned into a main sail of one of the ships that was sailing out in the water. And when I closed my eyes, I could still see the outline of everything, and then it slowly collapsed into a star sitting there in the blackness. That was over in a few minutes.

Although most discussed feeling relocated in the abstract sense, Mark (SD018) described a reconnection with the familiar when he said

I had a visual of just, my grandparents’ hallway when I was a kid. I dunno. It seemed like I was like seven for some reason. And I just looked straight ahead, and then, it was just the exact hallway at my grandparents’ house and there was this mirror on the back. It was like a door in the back and there was a mirror there. And I wasn’t tall enough to see in the mirror because I was seven apparently.

Some young adults reported strong dissociative states in which the passage of time was altered. Matt (SD001) said,

I remember I was sitting there, and I took the hit, and I held it, and it didn’t even seem like any time had passed at all. I started looking over, just to look kind of down this way, and it just went incredibly slow, and it seemed almost like I wasn’t even looking at my leg, and the, and the chair that I was looking at, almost like a distant landscape, or something.

These are often occasions in which young adults feel as if they experience the trip for a longer period than it actually occurred. Alex (SD026) even reported an experience in which his means of communication were altered. He stated:

I remember getting up and trying to talk to my friends. But it sounded like they were talking in a completely different language than I was used to. And when I spoke, I was trying to speak English, or, but, it seemed like, the thought that I had, turned into different syllables as I was speaking, but it was really sort of like sounded like a language to them and to me.

A driving motivation for salvia use is that young adults find these visual hallucinations exciting. As Al (SD011) described when asked why he so enthusiastically spoke about salvia, “Just crazy visuals, like mental visuals. I wasn’t actually seeing things, but my eyes were closed and what I was seeing in my mind was really exciting. That’s enough for me.” Bill (SD013) also highlighted similar sentiments, “Hallucinations are always really cool. I mean, they’re just

so beyond the everyday and it’s interesting to interact with that like ‘out of touch with reality.’ Just going somewhere else.” Alex (SD026) highlighted this succinctly when he said that after salvia use the “senses are sort of accentuated. Like colors are brighter.”

Although some young adults enthusiastically discussed their experiences, not all responded that these types of experiences were positive. As noted by Ken (SD003),

I just felt like, I don’t know, it’s hard to explain, like my head was full of like, broken glass or something. It was just like everything was just fractured and didn’t make sense, kind of. I just felt really confused . . . Things didn’t seem like they looked right, but I don’t really think they were any different, it just didn’t seem like it was right. And, I don’t know, I felt kind of negative. I didn’t see things changing color or anything like that, but it just, everything seemed like it was like, it just didn’t look right. It just didn’t make sense, kind of like it was . . . confusion, I guess would be one really good word to say how it felt. I kind of felt like I was malnourished, and just things were misfiring in my head.

Some young adults also described a strong sense of anxiety during the experience. Adam (SD004) reported,

Honestly, I was completely overwhelmed. To the point where, like I knew, I knew that it was happening to me, and I knew that I was, you know, I smoked salvia, and whatever, but, I just kind of, almost wished I hadn’t while I was freaking out. I remember feeling the compulsion to stand, and then take a lot of deep breaths, and just try to compose myself.

Carl (SD014) echoed these sentiments when he said, “I felt really trapped in my body. I just felt really weird and like anxiety was kicking in for me. I just felt weird so I never really wanted to try it again.” For some users, the experience of anxiety during salvia use—whether their initiation or a later occasion of use—is a sufficient deterrent from using the substance again.

Hallucinogenic Intensity

Salvia divinorum produces a brief, but intense hallucinogenic experience for the user. Indeed, the word “intense” was routinely used by respondents when asked to describe the salvia trip. As noted above, some young adults, often those with much wider experiences with hallucinogens, describe the intensity of the hallucinogenic experience in positive ways. Others, on the other hand, find the experience so intense that they would not continue to use the substance. This is the case even with experienced hallucinogen users. As noted by Anthony (SD023) who had previous experience with LSD and psilocybin, “I’m not saying I regret doing it, but I’d definitely not want to go down that road again . . . It was just too intense for me.” Some of these feelings of the negative nature of the intensity appear to coincide with some discussions of the potential for anxiety described earlier.

An element of the intensity often discussed by young adults is related to the short duration of the hallucinogenic

trip. It is seen as intense at least in part because the quick peak and rapid dissipation of effects. Bill's (SD013) description lucidly captured many of the sentiments expressed by young adults when he said,

Salvia is like a really short quick burst of a peak on mushrooms. You know, mushrooms have this slow bell curve where you start up, you start at the bottom, you start to slowly incline upward, and then you reach the top and you come back down. Salvia's just like straight up and straight back down in like ten minutes. It's really way, way more intense.

The users in this study reported trips of durations lasting from five minutes up to approximately a half-hour. No readily obvious patterns concerning positive and negative experiences emerged related to the length of the trips.

Some users report that the intense, short duration is a positive aspect of the substance. They can have brief experiences of "being out of my mind" but return to a functioning state relatively rapidly in comparison to other hallucinogens. As David said in response to a question about what he liked about salvia (SD010), "It comes on quick, doesn't last very long, and it's very intense. So it's just something that you can fairly easily pick it up, do it, and it doesn't take up a lot of time." As some young adults noted, this short duration may facilitate entry into other hallucinogens. Steve (SD007) said, "If anyone was trying to look into doing something more than marijuana, but they were afraid to delve into acid or shrooms or anything like that I would say like salvia, it would be a good way to introduce them to it. It is short acting enough." Other young adults report that the short duration is merely disappointing despite the intensity and contributes to their perception that it is cost inefficient. As Sharon (SD002) stated,

I think most people in these scenes don't use salvia. It's a drug that's different than any other just because it's so short . . . but, I don't think . . . it doesn't last long enough for it to be worth it. So, even if it's a good experience, it's still not worth it. When you do a drug, you expect it to last a lot longer. The short duration really is a negative for it.

Contexts of Use

Although it produces an intense, introverted state, interest in salvia is not without social foundations in the youth networks in which it appears to be popular. Drug use constituted a routine element in these youth networks and tended to be a social aspect of their lives. All of the young adults interviewed reported regular marijuana use within their social networks. Many also reported the use of other hallucinogens, predominantly LSD and psilocybin. Thus, the trend of salvia use appears to be nested within broader interest in drug use, particularly hallucinogenic drugs. Even many of the young adults who reported salvia use as their first hallucinogenic experience eventually went on to pursue other hallucinogens.

Most users report primarily using in home settings such as apartments and houses. These contexts were often described as "safe" places by the users. The need for a safe environment was espoused by some to facilitate a smooth hallucinogenic trip. Adam (SD004) said, "Environment is a big issue, I think. I definitely would have had a far worse time if I was in an unfamiliar place." Many young adults connected the need for safe locations for use to the intensity of the substance. Beyond extolling the virtues of psychological safety, most saw this as an element of pragmatic planning. As David (SD010) noted, "You want to be somewhere safe. You don't want like, if you're going to be rolling on the floor you don't want to roll into something sharp or maybe a campfire or something." Sharon (SD002) echoed these sentiments when she said,

It's good to be at home. I don't think it's a drug that you go out and do, because, I mean, even though it's similar to marijuana, like you smoke it in things, you want to be somewhere where you can control the settings, and like, enjoy most of it, rather than being out some place and having unpredictable circumstances.

Although many young adults primarily reported using salvia in home settings, a significant minority reported use in other environments, such as music festivals. As Ken (SD003) described,

There's a bunch of people, just thousands of people all over the place, and people are selling and sharing and buying drugs all over the place, and so, I was like, "maybe this stuff will be different." It was just, I can't remember where they were even from, what state, but, we were smoking pot together and somebody had some salvia, so like, "hey, I'll give it a try again." So I put it in a, I had a glass pipe, pretty similar to the one that we had around the first time, just a regular spoon-shaped one. And we filled it up, and burned on it for a minute, and it went pretty similar. I mean, I started to feel, just, I would say different, for about a minute, like I wasn't quite sure where I was going even, and then everything just seemed off. It just didn't seem right. Everything looked the same, but it didn't seem like it should look the way it did.

Ed (SD009) stated,

I think being around a different group of people, not necessarily knowing everyone around you, you've got your mind set on being at a venue, listening to music, and then trying different drugs now that you're there. So I would probably say doing it there maybe increased the buzz more, because I didn't know the people I was surrounded by, and I wanted to be able to enjoy what they were, you know, sharing with me.

In this respect, the awareness of environmental influences indicates that these young adults have a sense of the factors of "set and setting" influencing their experiences on the substance (Zinberg 1984). As noted in the previous paragraph, most young adults focus on home settings as these are considered safe spaces, given that they are controlled environments for the pursuit of the salvia high.

Beyond the environment of use, young adults overwhelmingly report using salvia within a limited social context, rather than while isolated. As Matt (SD001) stated,

It's not something that you'd wanna do at a party, it's not really considered a party drug, cuz it's so intense. But I guess it's just something that, like, a group of friends might do together. It's something that people will try and do in a group, a small group, like three or four people. Not a big group.

For some, however, use with others was not just about the sociability of the salvia ritual but predicated on aspects of safety. Sharon (SD002) clearly expressed the sentiments of such young adults when she said,

Well, the one thing that I always do is, I've never done it alone. I always make sure there's someone else there, and part of that is I get, I'm not sure if you'd call it a negative effect, but people have a tendency to take their hit and be holding it in, and it kicks in by the time that they, you know, breathe and they forget that they're holding the bowl, and they'll drop it and break. So it's important to always like take it and pass it away really fast, but other than that, I guess just the precaution of usually having someone else there. Even if they're doing it with you, you can kind of be grounded by that.

Modeling on Marijuana

As noted earlier, young adults overwhelmingly described smoking the substance when using salvia. In many cases, young adults modeled their consumption of salvia upon their previous experiences using marijuana. For example, when asked how he knew how to use salvia on his first occasion of use Adam (SD004) said, "I didn't. You know, we got it in a little, a little container, and I just took a pinch and loaded the bong up like it was weed, and just took a really deep breath." Ken (SD003) echoed this by saying, "I didn't really. I mean, we just put some in there, and, I mean, it was just like this glass, spoon-shaped pipe, just like it was a pot pipe." Young adults also described sitting around a room or in a circle with their friends and passing the pipe/bong to the next user after they had finished their inhalation, similar to marijuana social rituals.

Although many young adults drew upon their experiences with marijuana in their practice of salvia use, they drew clear distinctions between the two substances. As Bill (SD013) noted, "Weed is waaaaay more understated. Being high is just a background thing . . . There is no hallucinations. It's mostly mood and like some sensory effects, like just feeling better physically." The issues regarding control and agency discussed by some as problematic were also expressed by young adults they drew distinctions between marijuana and salvia. Carl (SD014) said,

With marijuana you have a lot more control. Actually, you have complete control. I would feel in my head about the way you handle yourself. On salvia, I just felt that I had no real control over what my body was about to do and what happened, and I didn't like that.

Acquisition of Salvia

Almost all young adults reported obtaining salvia from head shops, with very few reporting acquisition through the Internet. Most cite the ease of acquisition from a head shop as the reason it's the best location to buy salvia. As Steve (SD007) described, "They (friends) live really close to the head shop, so we just walked out the door and picked up I think it was 40x. They had 20x, 40x, and 60x there and so we picked up a thing of 40x, and then just went back home." Although for rural or suburban young adults who do not reside near head shops the Internet may present the most direct means of access, young adults in urban areas with relative ease of access to head shops appear to dismiss the Internet as a key means of obtaining salvia. It is also worth noting that, unlike illicit substances, salvia is not distributed through social networks of psychedelic enthusiasts or procured from dealers.

The head shops observed in New York offered a range of salvia products. These "brands" often had names that made reference to other types of drugs such as "Ecstasy" brand or "Purple Sticky" brand. The prices were dependent upon the concentration of Salvinorin A in the product. For example, the concentrations observed at the head shops ranged from 5x to 80x. The pricing corresponded by ranging from \$15 for a small tin of 5x salvia to \$80 for a small tin of 80x salvia. The sale of salvia comprises a noticeable component of sales at head shops. One sales clerk at a head shop filled with artistic glass pipes, elaborate water bongs, and other drug paraphernalia commented that sales of salvia accounted for "probably 30% to 35% of sales lately."

A number of young adults related that the cost of salvia purchased from head shops remains an obstacle. Ed (SD009) complained,

It's not one of the cheaper drugs. Someone could easily go out and spend ten dollars and get him some marijuana. Somebody could easily spend, you know, another ten dollars, get another hallucinogen, instead of spending, you know, I think the cheapest I may have seen it was about thirty dollars for some salvia. I'm not for sure. I haven't been to too many head shops, and smoke shops, to see, but, you know, it's a more expensive drug that you can get right now.

Accordingly, such young adults assert that hallucinogens such as LSD and hallucinogenic mushrooms are far more cost-effective uses of their resources.

Legality and Salvia

The legality of a substance shapes the attitudes of young adults in many ways. Some report that the primary, if not sole, advantage to salvia use is the legality of the substance and its ease of access. When discussing what it was he liked about salvia use, Ed (SD009) said, "I think it's that it's legal, a legal hallucinogen; the fact that I can hallucinate and not feel guilty; that I can't get caught and go to jail for actually having it in my possession." Mark (SD018) echoed these

sentiments when he discussed what he liked about salvia by saying, “I’d say, first of all it’s legal. So, you don’t really feel as if you’re gonna get in trouble if you get caught with it.”

Other young adults posited that the legality of salvia produces a “novelty effect” drawing in individuals otherwise not interested in hallucinogens and the experiences they produce. Matt (SD001) noted

It’s legal, and so everyone’s just kind of curious about what it is. I mean it’s, it’s kind of like LSD and mushrooms don’t come around very often, so people, they wanna know, you know. If I have salvia they’re gonna wonder what it’s all about. A lot of people are worried it’s gonna become illegal soon, and they just wanna see what it’s like before it is.

Despite this novelty effect, Matt did not think that the legality of the drug would lead to the trend lasting long. He said, “I’ve always kind of thought that the reason they hadn’t made it illegal was because no one really bothers to do it all that much. Once they’ve done it a few times, they kind of burn out on it.” Thus, the novelty of salvia use may wane as these recent users did not indicate a high probability that it would develop into a long-term trend.

Although many young adults discussed pragmatic issues on the legality of salvia, some also described how salvia use cohered with their politics on drug legalization. For example, Gnome (SD020) elaborated on his views on marijuana legalization through a discussion of salvia’s legality by saying, “I feel like if this plant is going to be legal, and it’s going to do this crazy thing to me, then marijuana should definitely be legal because it’s just, I’ve never had hallucinations [on marijuana]. I mean, it can be used for obviously many different medicinal uses.” Ed (SD009) echoed, “In general, it lets me know that there’s a small break in our system. That they are letting a local hallucinogen be legal, because they haven’t found that any negative adverse effects happen.”

Salvia and Risk

Many young adults reported searching out information on *Salvia divinorum* on the Internet and through other sources. Most of their searches concerned dosage, safety, and effectiveness. With regard to the health effects of salvia, most young adults report no significant negative health effects from salvia use, although some report a mild headache or mental cloudiness for a few hours afterwards. As Adam (SD004) noted,

Well, after about five minutes or so, you’re definitely, definitely back in reality, but things aren’t . . . things were just kind of cloudy for the next several hours afterward. I guess it was, it was kind of, you just feel, you just feel mentally drained. You just kind of slow down for a little bit for the rest of the evening.

In this respect, some users experience something akin to a slight hangover in the wake of salvia use.

Although these young adults did not report any health problems associated with salvia, some did note that it could be problematic for those with underlying mental health problems. Gnome (SD020) clearly summed up these sentiments when he said

Well, it seems as though, just because I have had such hard hallucinations, someone who already has maybe some psychological problem, or maybe schizophrenia, it could maybe push them over the edge or cause someone to snap potentially. I guess, maybe, that’s just because of how vivid and just crazy it’s been every time I’ve done it.

In this regard, some see the intensity of salvia as potentially problematic for those with preexisting mental health conditions, and thus do not view it as a drug without ramifications.

Beyond their own experiences, users did not report any negative health events among those in their social networks. The general absence of reports of negative effects circulating within youth networks may serve to reinforce social norms favorable towards salvia use. Overall, young adults report a relatively low risk profile for salvia, which may be influenced, in part, by its legal status. Steve (SD007) said, “It’s legal so that always kind of gives you an air of ‘well if the government thinks it’s better than acid is, it can’t be too bad.’” Al (SD011) also expressed the sentiments of many young adults when he said, “I guess it seems like someone out there thinks it’s safe enough that it can still be legal.”

DISCUSSION

The recreational use of *Salvia divinorum* represents a significant recent drug trend among youth and young adults, although one that remains somewhat on the fringe. Young adults report intense hallucinations through smoking salvia, with a rapid onset and relatively quick dissipation of effects. The main experiences reported included vivid visual hallucinations, changes in bodily form, relocation to a different setting, and time dissociation. While some enjoy these experiences, others find the hallucinations too intense, leading some to remark that they would never use the drug again. Notably, these young adults do not report entheogenic effects—that is to say they do not utilize salvia for religious or spiritual purposes. While such patterns cannot be ruled out, they do not appear to be common among young adults. It remains primarily a recreational psychoactive substance.

Despite the intense hallucinations, which often transport these young adults into their own world, they largely used salvia within groups. This remains somewhat paradoxical, but use on one’s own was exceptional. Additionally, salvia use was generally part of a broader drug landscape within these youth networks. Salvia-using young adults in this study used a range of other psychoactive drugs, particularly marijuana and hallucinogens, as well as others such as LSD and psilocybin. Indeed, many modeled their consumption

of salvia on their past experiences using marijuana—experiences which provide a knowledge base on utilization. Thus, it appears to be primarily those with previous drug experiences who use salvia, rather than salvia serving as a vehicle for other drug use.

Some have suggested that despite the recent development of the salvia drug trend, it does not appear to keep young adults interested since less than half of them who had once tried the drug had used it within the past year (Khey, Miller & Griffin 2008). This assertion is somewhat supported by this qualitative data. Although some young adults enjoyed the intense hallucinations produced by salvia and appreciated its short durations, many other young adults found salvia to be too intense, just a novelty, or cost-inefficient. Thus, while the salvia trend has received recent media attention as a growing drug issue, it may not have staying power as a drug trend, regardless of its legal status, because many young adults either find it untenable or simply prefer alternative psychoactive substances.

The distribution of salvia remains fairly confined for urban young adults. In this sample, the young adults most often bought salvia from head shops. The Internet did not represent a significant resource for acquiring the drug. As noted earlier, this may be a product of living in an urban area with easy access to head shops with a ready and plentiful supply. Suburban and rural young adults may more readily rely upon the Internet as a key source of procuring this substance. Despite that the Internet did not appear to be a key distribution point for salvia, it was often a key resource for information acquisition among young adults. They pursued knowledge about the drug's effects, side effects, and legality by exploring websites with information on these topics. Thus, even though the Internet does not play a large role in salvia acquisition, it does play a role in its use.

The legality of salvia played a key role in piquing the interest of some young adults. Many asserted that they were curious specifically because they were shocked to hear that there was a hallucinogenic agent that they could freely and legally purchase. Beyond the fact that salvia is an herb, the legality of salvia also implied to some that it might be safer than other drugs. Such young adults reasoned that the federal government would have outlawed the substance by

now if it created circumstances triggering negative health outcomes—an odd sense of faith in the government whose other drug laws they routinely transgress. These sentiments may be enhanced by the norms emerging out of experiences that circulate within peer networks themselves. These young adults largely asserted that beyond the “cloudiness” they experience in the wake of salvia use, they had not experienced any negative health effects. Beyond their own experiences of relative health, these young adults asserted that they did not have others in their peer networks who had experienced negative health effects. Thus, many young adults don't experience problems and do not know others who experience problems. These aspects of the substance may work in concert to continue to facilitate “dabbling” in salvia even though youth and young adults may not develop a long-term interest in using it.

Like any study, this article does have some limitations. It is based upon a relatively small qualitative sample that may not be representative of the larger population of young adult salvia users. Particularly, these young adults may not represent the same patterns of use as their suburban and rural peers. Despite these limitations, this study provides an important qualitative profile of *Salvia divinorum* use among young adults that fills a gap in the literature regarding descriptive reporting on salvia use from the perspective of young adults. It provides further evidence of the fringe nature of *Salvia divinorum* use and, overall, suggests that given the relative disinterest in salvia use after initiation, this may not be a sustainable drug trend.

NOTES

1. These tryptamines were rendered illicit under the federal Schedule of Controlled Substances since they were determined to be chemical analogs to illicit substances such as DMT.

2. All participants in the study were assigned pseudonyms. Thus, all names utilized in this article have been assigned to facilitate confidentiality of the respondents. Although given pseudonyms, their corresponding code number has been listed as an identifier.

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